



2
0
1
7

Spring
Meeting

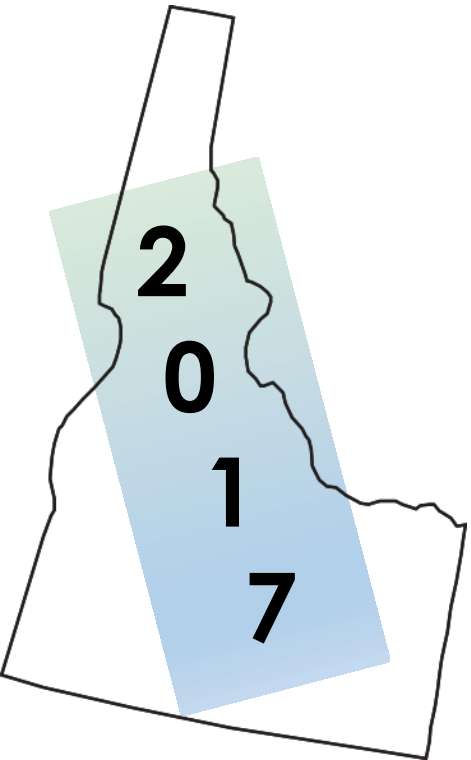
Idaho Geospatial Council

*Thursday, April 20, 2017
1:30 – 3:30 pm
West Yellowstone, MT*

GIO Update

Bill Farnsworth

Security, Security, Security...



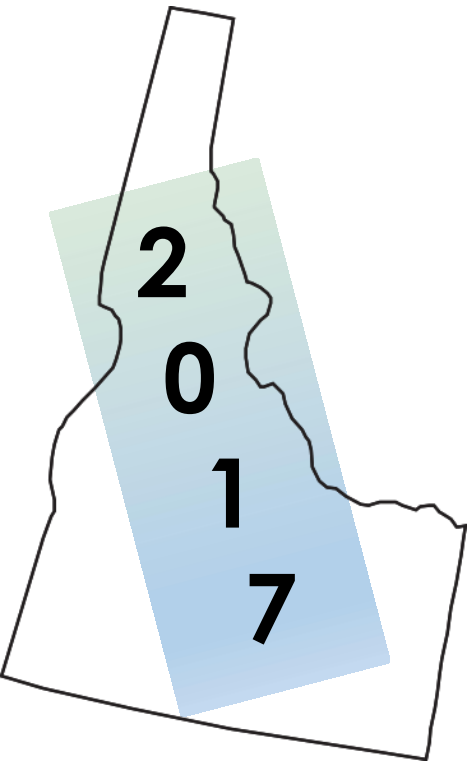
Systems
People
Servers
Data
HTTPS



GIO Update

Bill Farnsworth

Projects:



Boise River – Risch’s Office

Boulder White Clouds – Risch’s Office

Redistricting – Legislature

AGOL – 39 Agencies – 139 Users

Parcels – Ada County Update

Esri Contract – Sole Source

Esri Agency ELA – Several Agencies

GIO Update

Bill Farnsworth

Boise River – Risch's Office

Do you have layers of interest?

Multiuse:

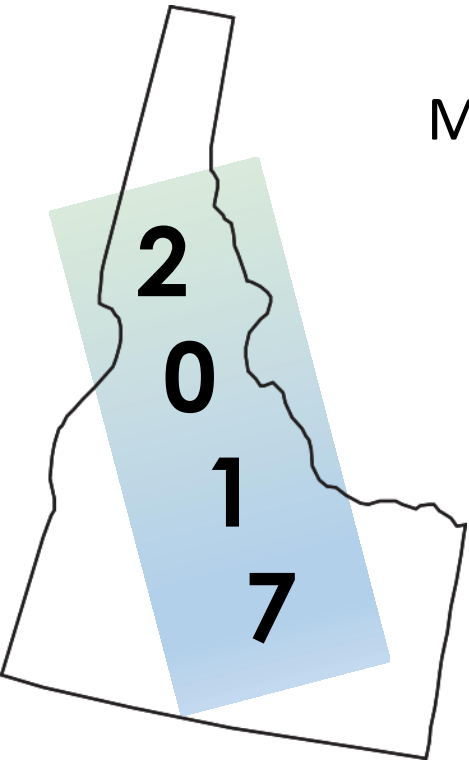
Recreation

Wildlife

Irrigation

Statistics

Other?



GIO Update

Bill Farnsworth

Boulder White Clouds – Risch's Office

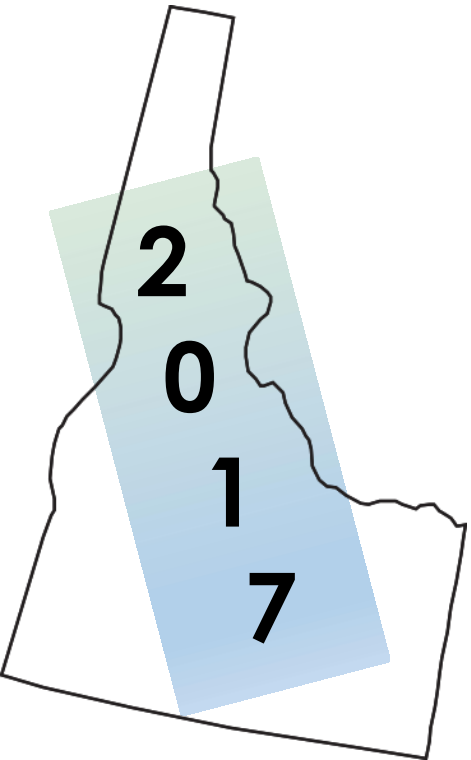


Working on a Story Map to tell the story about the Legislation

Historic Use

Mixed Use

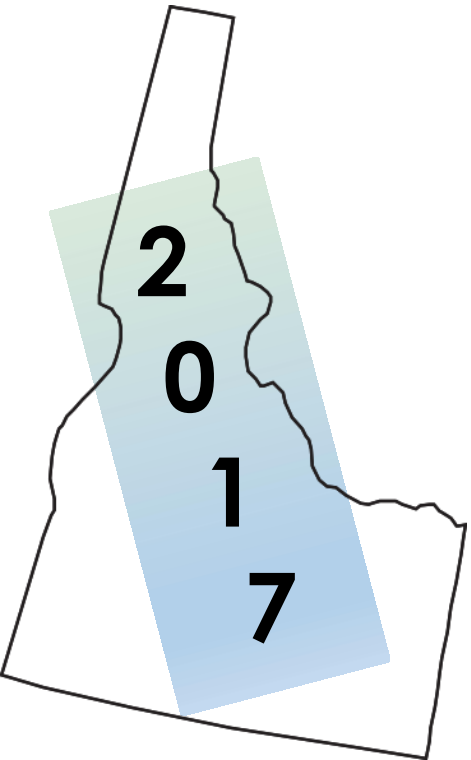
Wilderness Area



GIO Update

Bill Farnsworth

Census 2020 - Legislature
Redistricting – Future – Legislature



1950
CENSUS

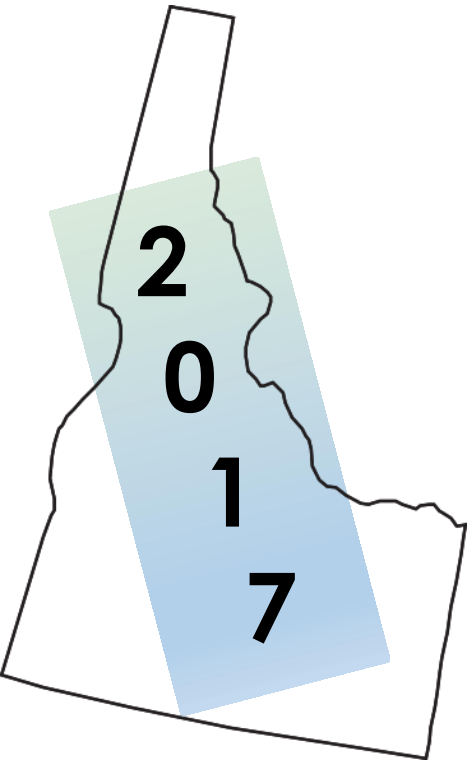
www.bigstock.com · 17344826

GIO Update

Bill Farnsworth

AGOL

- 39 Agencies
- 139 Users

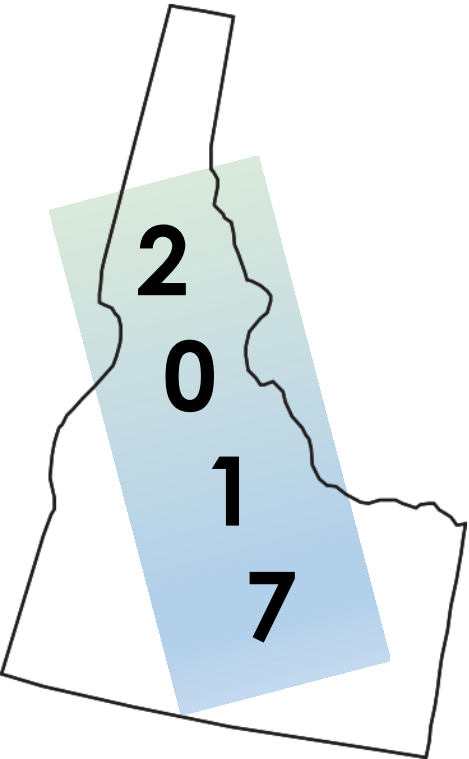


A screenshot of the Idaho ArcGIS Maps website. The header features the 'IDAHO ArcGIS Maps Geospatial Resources' logo. Below the header is a navigation bar with links: 'Maps.Idaho.Gov', 'Excel Add-in for AGOL', 'Learn ArcGIS Online', 'Thumbnail Generator', 'Support', and 'Documentation'. The main content area displays a carousel of featured maps and applications, including 'Recreation', 'Health', 'Boundaries', and 'Recreation'. Each item has a thumbnail image and a title. At the bottom, there are two text boxes: 'Welcome Idaho's Mapping Project Home Page - For State Agencies' and 'New Video Training page available'. The website is framed by a large background image of a mountain landscape.

GIO Update

Bill Farnsworth

Parcels.Idaho.gov
– Ada County Update



A secure service from Idaho.gov

Idaho.gov

IDAHO

Geospatial Office

County Parcel Sharing

How this works

Access parcel data from participating counties by downloading. Updated parcel data is usually received from the participating counties at least every 6 months.

DOWNLOAD DATA

[Sign Up for Data](#)

PUBLIC STANDARD

- Available for free.
- Registration is required.
- Data includes: Parcel Id, Date Modified, Date Updated, Steward, FIPS, ASR Acres.

COMPREHENSIVE

- Not available for all counties
- Cost varies by county.
- Registration required.

VIEW MAP

[Interactive Map](#)

VIEW AVAILABLE COUNTIES

Counties with available data are highlighted on interactive map. Zoom in for parcel boundaries.

PARTICIPATING COUNTIES

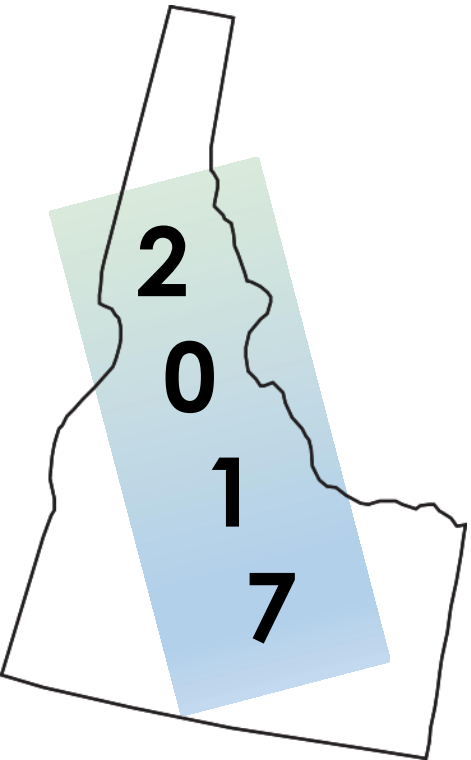
- Ada
- Bonneville
- Butte
- Camas
- Canyon
- Elmore
- Jefferson
- Kootenai
- Madison
- Nez Perce
- Teton

GIO Update

Bill Farnsworth

Esri Contract – Sole Source

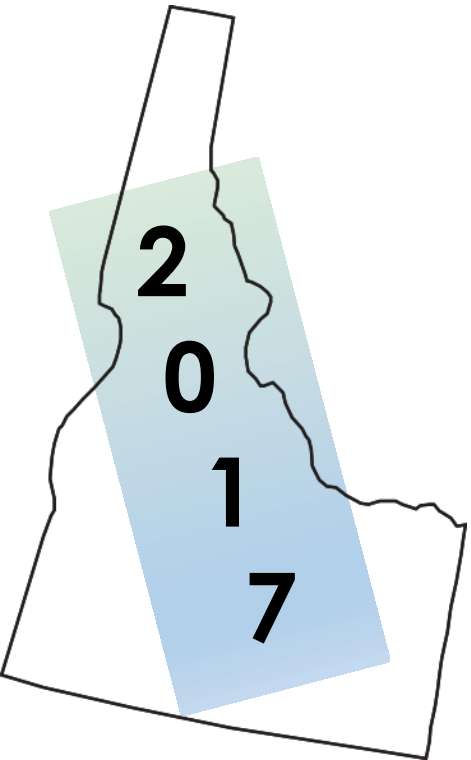
Esri Agency ELA – Several Agencies



GIO Update

Bill Farnsworth

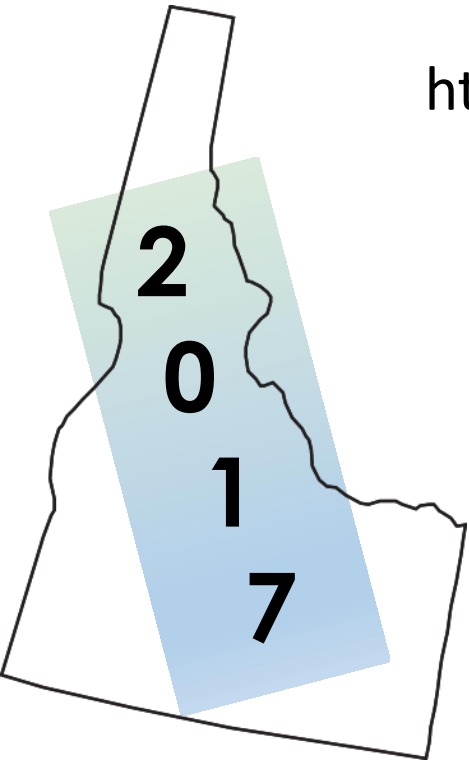
Survey123 – Several Agencies



GIS Open Data Portal

Bill Farnsworth

<http://data.gis.idaho.gov/>



The screenshot shows the homepage of the Idaho Enterprise Open Data Portal. At the top, there is a blue navigation bar with the portal's name and links for 'My Data', 'Sign In', and 'Sign Up'. Below this is a header section featuring the 'IDAHO' logo, a compass rose, the 'GREAT SEAL OF THE STATE OF IDAHO', and the text 'Open Data Portal'. A dark blue banner below the header contains a welcome message and a list of user capabilities: searching for geospatial data, downloading data in various formats, and accessing interactive maps. The main content area has a 'Find Data' section with a search bar and a magnifying glass icon. Below this is an 'Explore Data Categories' section with eight icons representing different data types: Agriculture (green leaf), Boundaries (orange grid), Environment (blue mountains), Community Safety (yellow shopping bag), Education (purple schoolhouse), Health (teal heart with pulse), Recreation (green tree), and Transportation (black car). At the bottom, there is an 'Additional Links' section with links to 'Inside Idaho', 'Lidar Consortium', and 'Idaho Geospatial Council-Executive Committee'.

Idaho Enterprise Open Data Portal

My Data Sign In Sign Up

IDAHO

Open Data Portal

Welcome to the Idaho Enterprise Open Data Portal

The Idaho Geospatial Office Open Data Portal links together various Agencies' Open Data Portals as well as Individual Data Sets from a variety of sources.

On this site, users have the ability to:

- Search for Geospatial (GIS) data across the State Enterprise and beyond
- Download the data in a variety of formats
- Access and view a wide variety of [interactive maps](#)

Find Data

Search for Data

Explore Data Categories

Agriculture

Boundaries

Environment

Community Safety

Education

Health

Recreation

Transportation

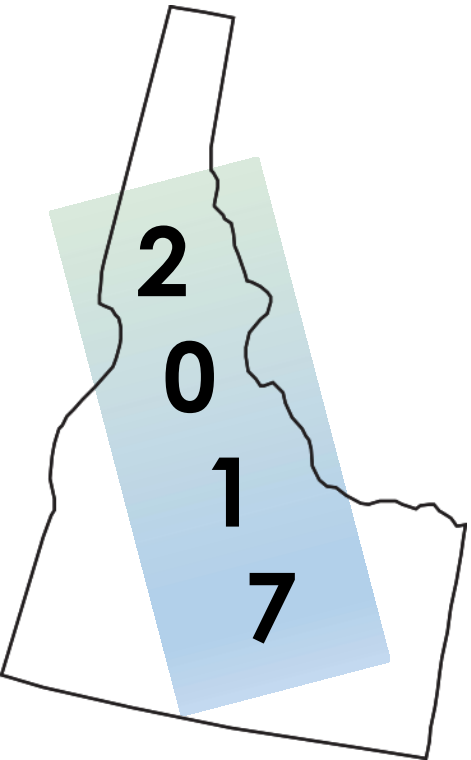
Additional Links

[Inside Idaho](#)

[Lidar Consortium](#)

[Idaho Geospatial Council-Executive Committee](#)

GeoNet Idaho GIS

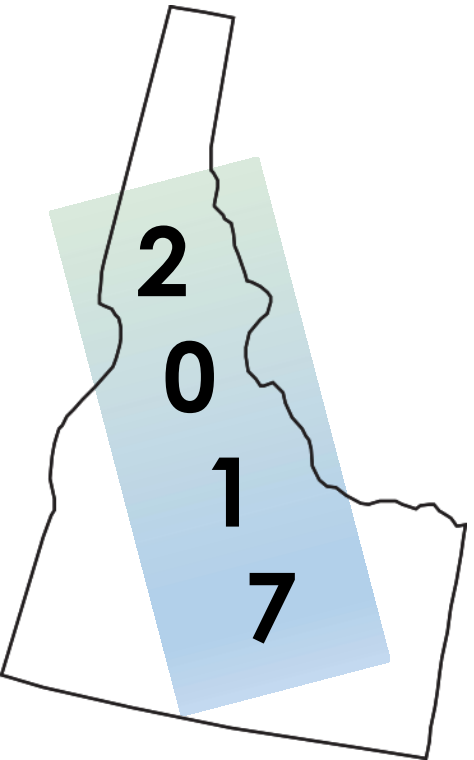


A screenshot of the GeoNet website's 'Idaho GIS' community page. The header features the 'GeoNet The Esri Community' logo and navigation links: Home, News, Communities, All Content, ArcGIS Ideas, and GeoNet Help. A search bar and a notification bell are on the right. Below the header is a banner image of a forest at sunset with the text 'Idaho GIS'. A secondary navigation bar includes links for Activity, Content, People, Projects, Reports, and Calendar. The main content area has a 'CREATE:' section with icons for Status Update, Question, Discussion, Blog Post, Files, Document, Poll, Video, Event, and Idea. Below this is a text input field with the placeholder 'What's going on?'. To the right, there are sections for 'KEY DATES' (showing 'No dates are currently scheduled.'), 'TOP PARTICIPANTS' (listing 'Bill Farnsworth'), and 'HELPFUL LINKS'. The 'RECENT ACTIVITY' section shows a post by 'Bill Farnsworth in Idaho GIS' from '1 month ago' with the text 'This is going to be a place for Idaho specific discussions.' and interaction links 'Like (0) · Comment · Share'.

<https://geonet.esri.com/groups/idaho-gis>

GIS Accomplishments

What's going on in Idaho?





IDWR Update

Dan Narsavage

20 April 2017



Mapping Tools

[General Map](#)

[Recreational Mining Map](#)

[Dams of Idaho Map](#)

[Water Measurement Map](#)

[Evapotranspiration Viewer](#)

[Water Rights Accounting Map](#)


[Flood Hazard Map](#)

[Well Drillers' Locator Map](#)


[Geothermal Resources Map](#)

[Wild and Scenic Watersheds Map](#)

[Ground Water Level Map](#)

 [Create and Print a Map for Water Right Applications](#)

[Ground Water Quality Map](#)

 [ArcGIS Online Mapping Tools](#)

[Irrigation Organizations Map](#)

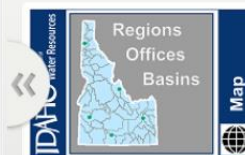
[Irrigation Rights Finder](#)

... [see more maps](#)

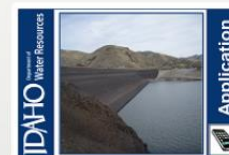
IDWR's Online Mapping Tools



Maps and Applications



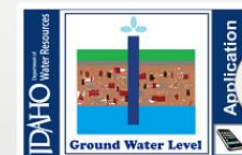
[Administrative Areas](#)



[Dams of Idaho](#)



[Flood Hazard](#)



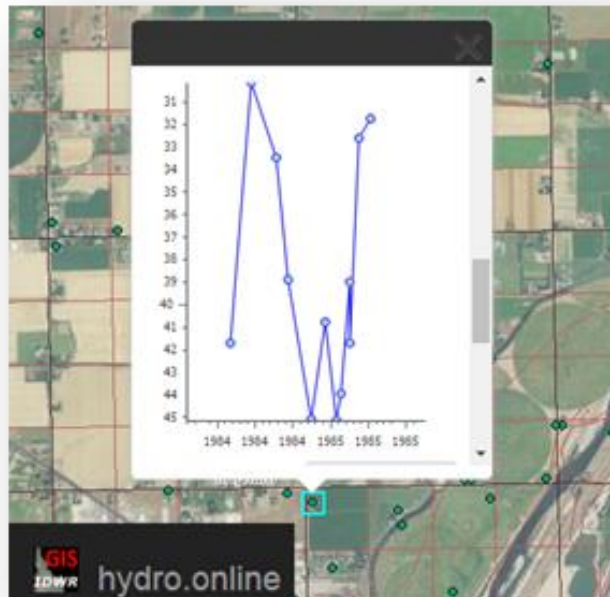
[Ground Water Levels](#)

The Idaho Department of Water Resources serves the people of Idaho and protects their welfare by making sure water is conserved and available to sustain Idaho's economy, ecosystem and the resulting quality of life. IDWR provides a variety of services for the public, such as water rights research, historical record reproduction of water rights, driller's reports, and dam safety inspections.

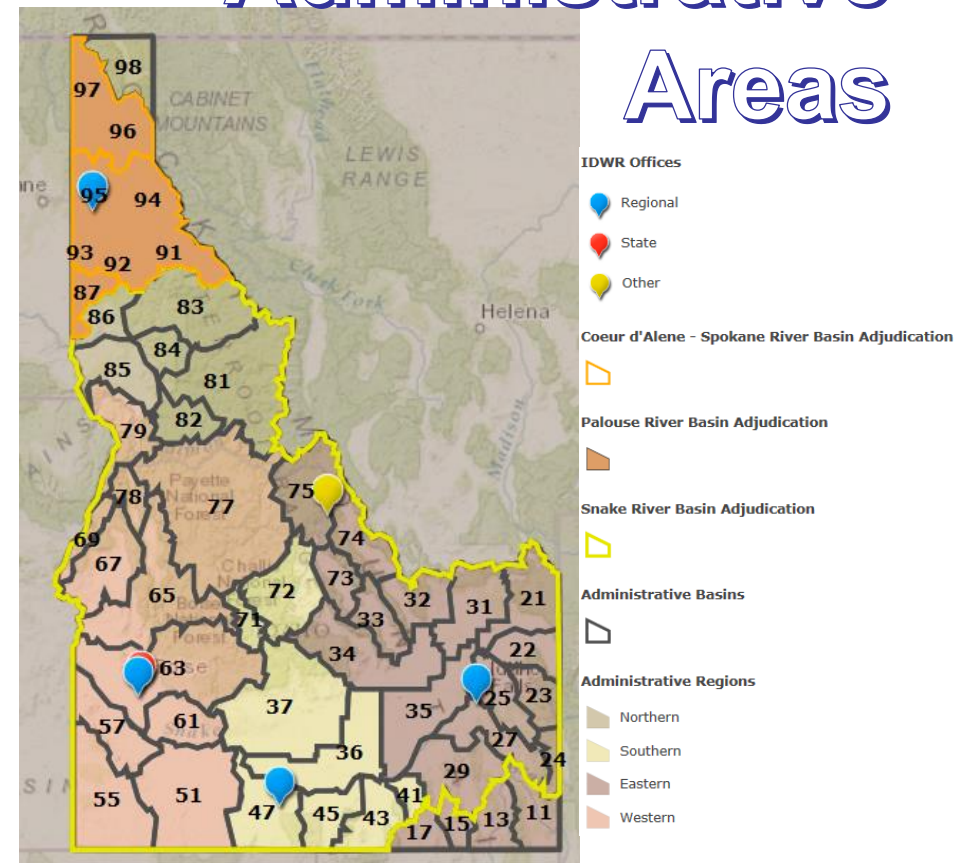
To download the data displayed on this website, please visit our [Open Data](#) site.

IDWR's Online Mapping Tools

Groundwater
levels

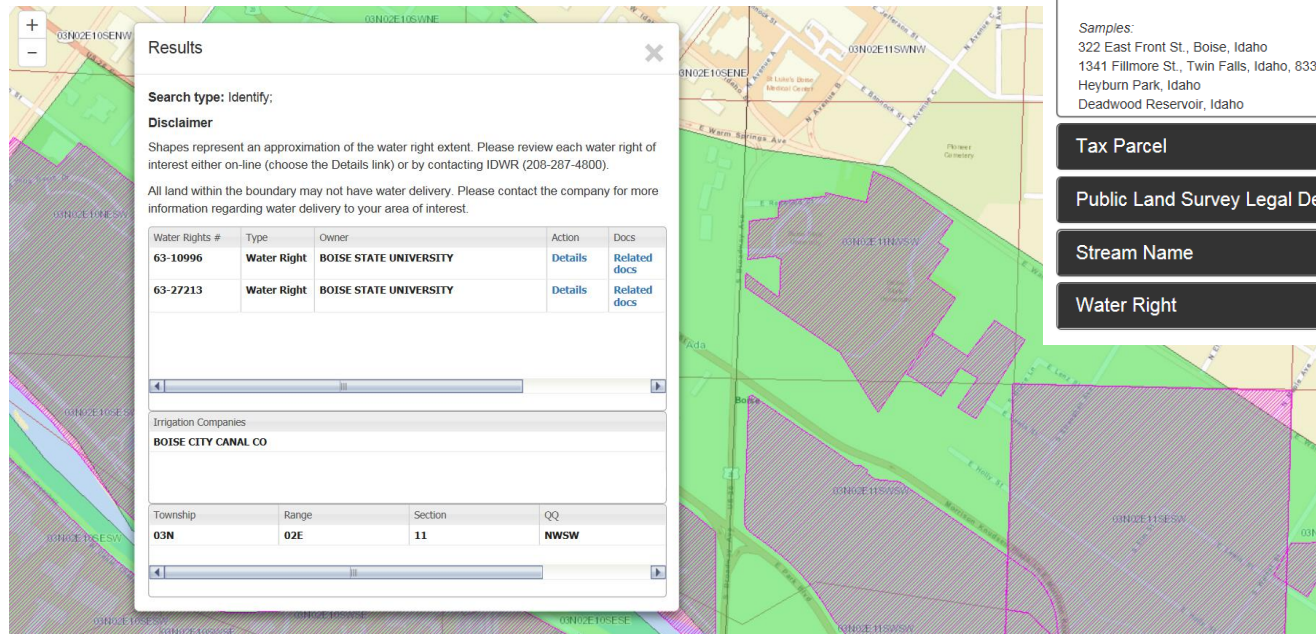


Administrative
Areas



IDWR's Online Mapping Tools

Irrigation Rights Finder



Results

Search type: Identify:

Disclaimer
Shapes represent an approximation of the water right extent. Please review each water right of interest either on-line (choose the Details link) or by contacting IDWR (208-287-4800).
All land within the boundary may not have water delivery. Please contact the company for more information regarding water delivery to your area of interest.

Water Rights #	Type	Owner	Action	Docs
63-10996	Water Right	BOISE STATE UNIVERSITY	Details	Related docs
63-27213	Water Right	BOISE STATE UNIVERSITY	Details	Related docs

Irrigation Companies
BOISE CITY CANAL CO

Township	Range	Section	QQ
03N	02E	11	NWSW

Locate by...



Coordinates - lat/lon, IDTM, UTM...

Street Address or Place Name

Address:

322 East Front Street



Find ...

Enter address, city, state (or enter a place name). The request must end with ".Idaho" or a zip-code.

Samples:

322 East Front St., Boise, Idaho
1341 Fillmore St., Twin Falls, Idaho, 83301
Heyburn Park, Idaho
Deadwood Reservoir, Idaho

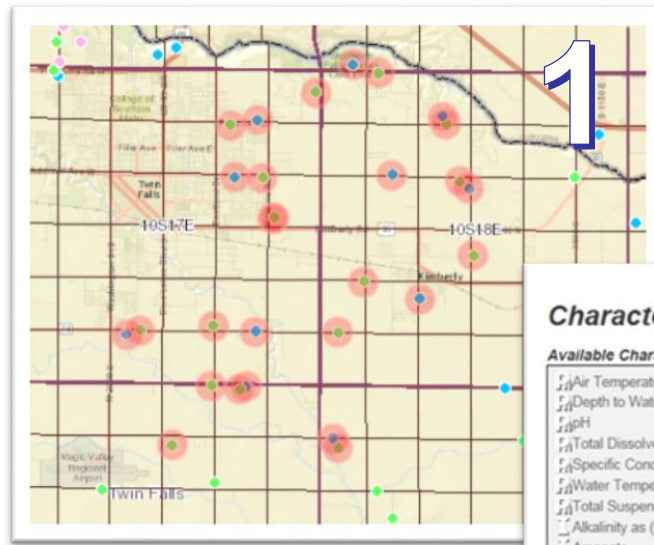
Tax Parcel

Public Land Survey Legal Description

Stream Name

Water Right

IDWR's Online Mapping Tools



Groundwater Quality

A screenshot of the 'Characteristics' selection interface. It shows a list of 'Available Characteristics' on the left, a central column with 'Request or Remove All' buttons, and a 'Requested Characteristics' list on the right. A large blue number '2' is overlaid on the interface.

Characteristics

Available Characteristics

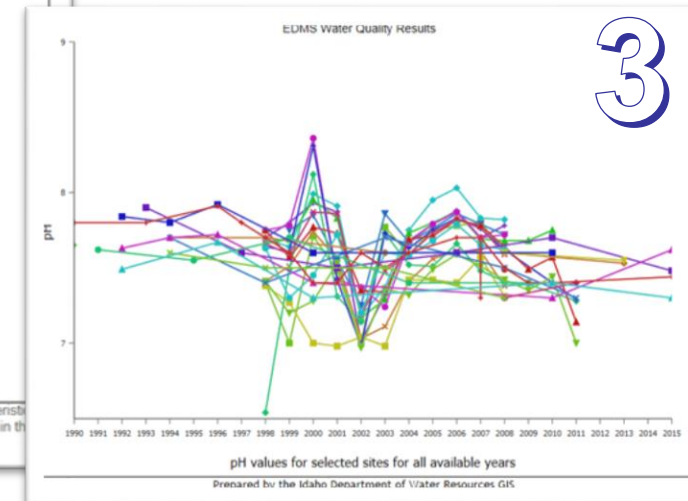
- ☐ Air Temperature
- ☐ Depth to Water
- ☐ pH
- ☐ Total Dissolved Solids
- ☐ Specific Conductance
- ☐ Water Temperature
- ☐ Total Suspended Solids
- ☐ Alkalinity as (CaCO₃)
- ☐ Arsenate
- ☐ Arsenic
- ☐ Arsenite
- ☐ Barium
- ☐ Bicarbonate
- ☐ Cadmium
- ☐ Calcium
- ☐ Carbonate
- ☐ Chloride
- ☐ Chromium
- ☐ Copper
- ☐ Cyanide
- ☐ Disodium Methyl Arsonate

Requested Characteristics

Request or Remove All

Find alias

Instructions: Click available characteristics to move them into the requested characteristics list. Click requested characteristics to remove them from the list. Click arrow-buttons in the center column to move an entire group of characteristics between lists.



Evapotranspiration Mapping

Three-year effort led by NASA & DRI

Develop operational ET Mapping tools and
10 years of ET data

Satellite-based: Landsat and Sentinel 2

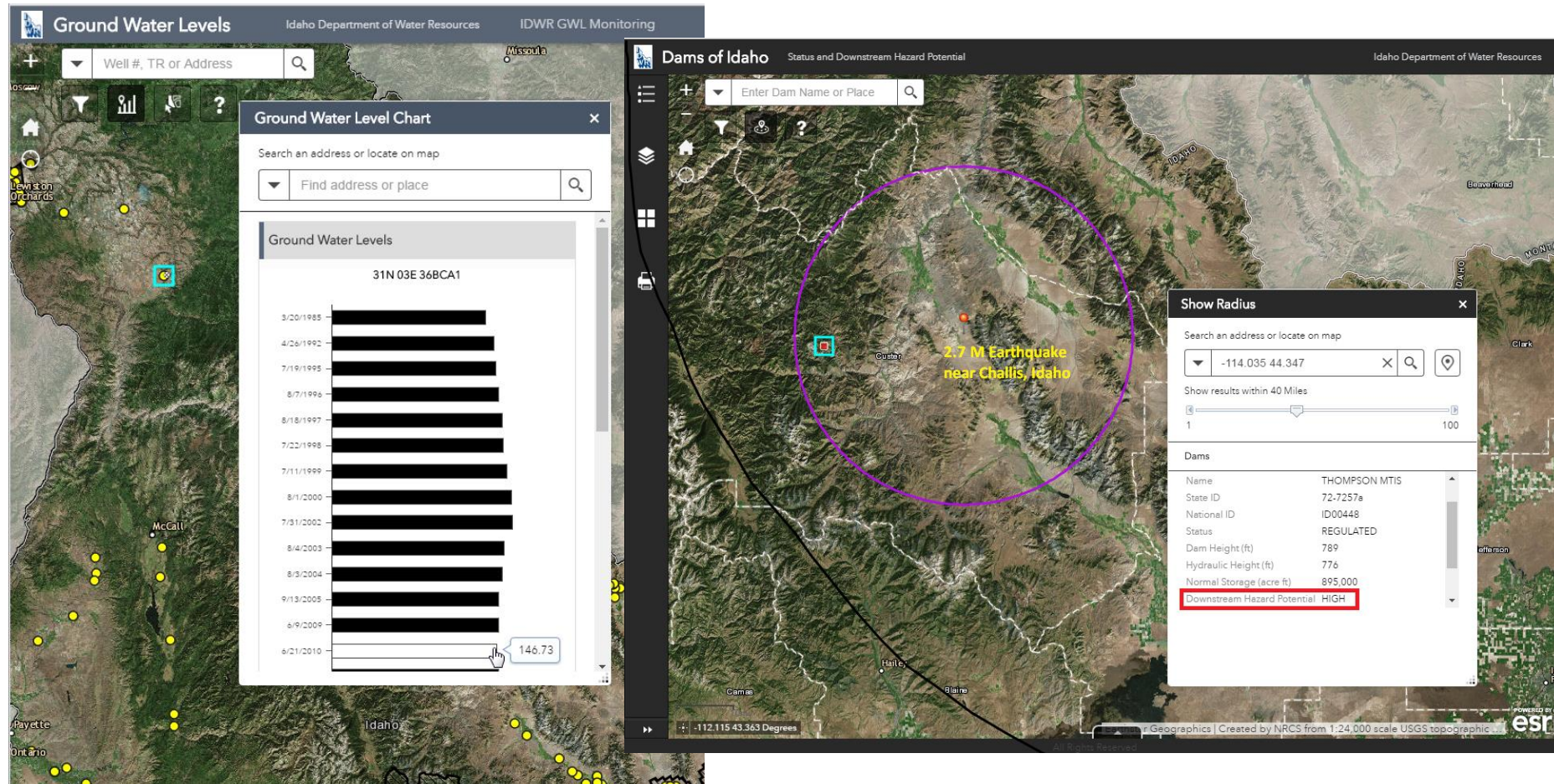
Compile ET stats in geodatabase by field,
irrigation entities, water rights, and model
cells

Bear River Basin

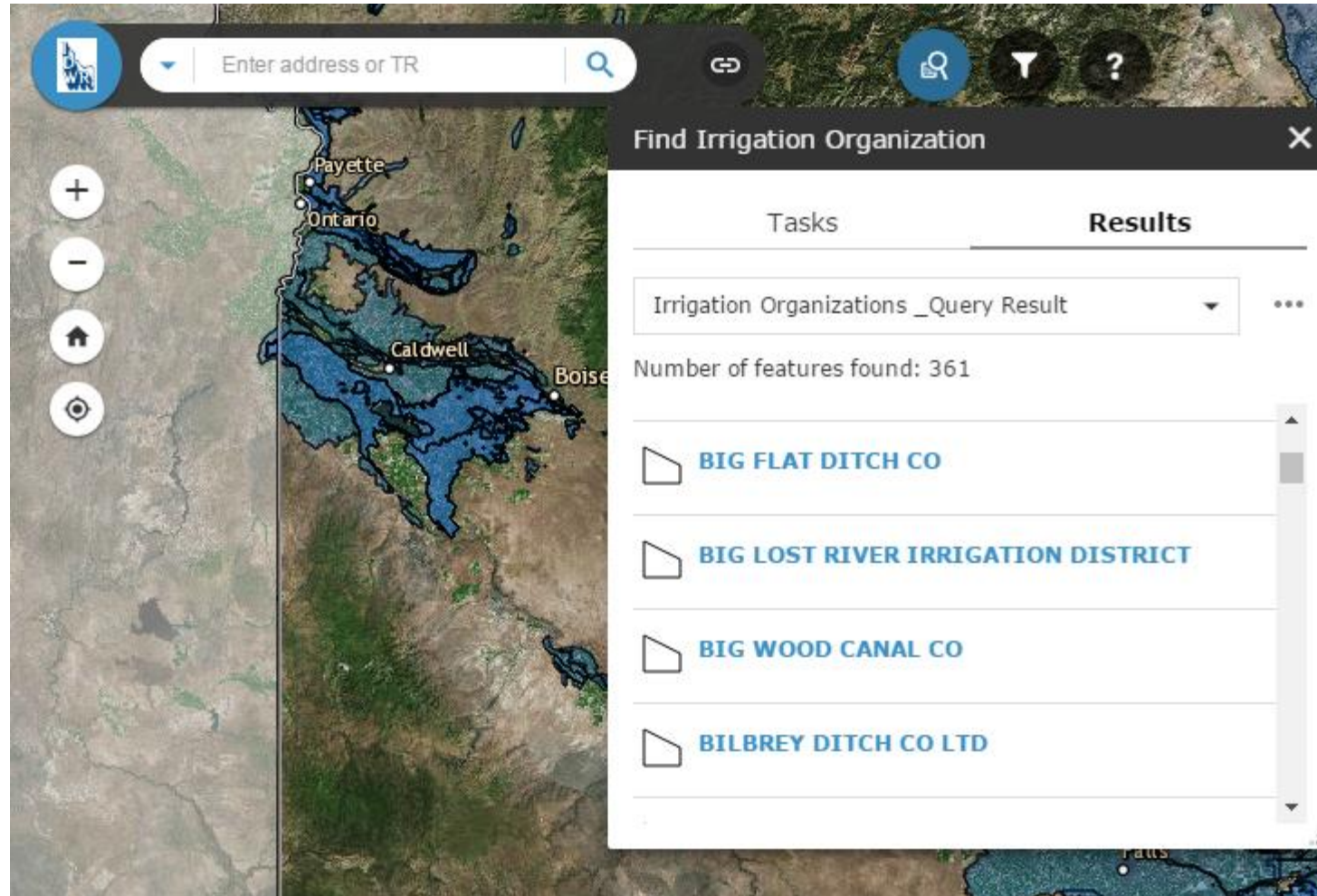


Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

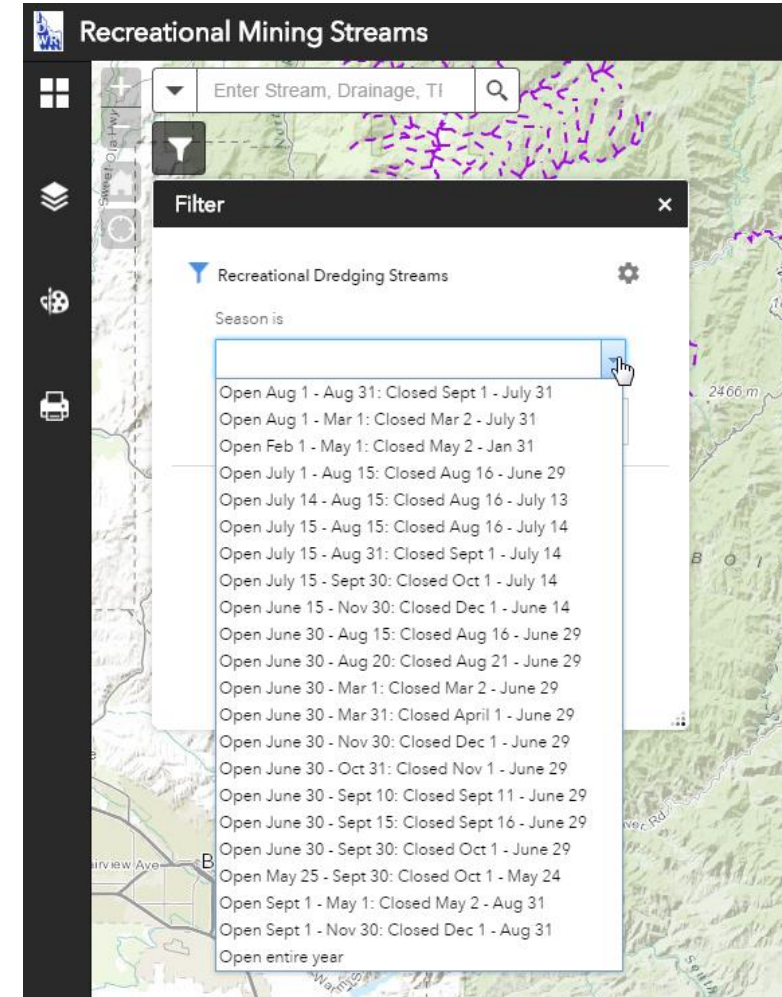
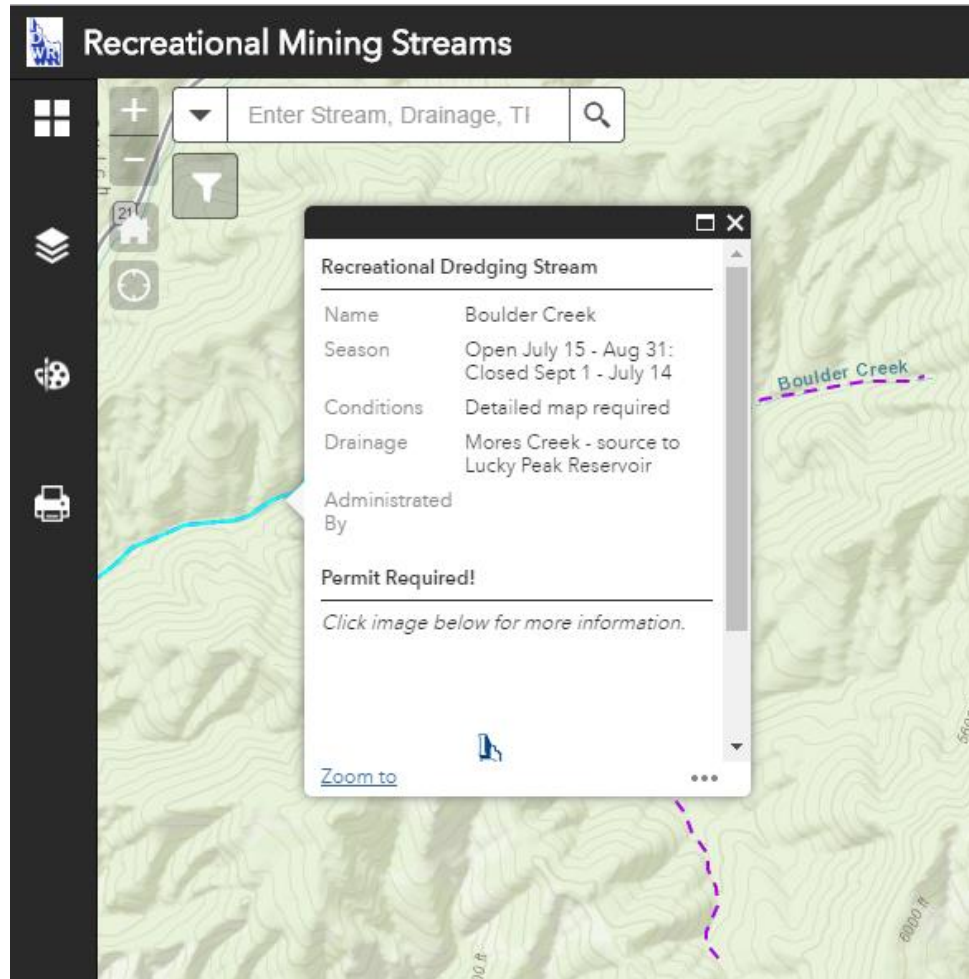
ArcGIS Online



ArcGIS Online



ArcGIS Online



Open Data Portal

- <http://data-idwr.opendata.arcgis.com/datasets>

The screenshot shows the web interface of the Idaho Department of Water Resources Open Data Portal. At the top, there is a dark blue header with the IDWR logo and the text "Idaho Department of Water Resources". Below the header is a search bar with a magnifying glass icon and a checkbox labeled "SEARCH WITHIN MAP". To the right of the search bar is a button labeled "My Activity". Below the search bar is a map showing a portion of Idaho and the Great Plains region of Nebraska. The map includes labels for "Vancouver", "Salt Lake City", and "GREAT PLAINS NEBRASKA". Below the map, there is a text string "Esri, HERE, Garmin, FAO, NOAA, USGS, EPA". Below the map, there is a section titled "1-10 of 50 results" with a dropdown menu labeled "Most Recent" and a "Share" button. Below this section, there are two dataset listings. The first listing is titled "Area of Common Groundwater Supply (from Ground Water Management)" and is shared by IdahoDeptWaterResources. It includes a thumbnail image of a map with a red outline and a "Layer" button. The second listing is titled "Minimum Stream Flow (from Regulatory Areas)" and is also shared by IdahoDeptWaterResources. It includes a thumbnail image of a map with a blue outline and a "Layer" button. To the right of the dataset listings is a section titled "My Favorites" with a note that says "click ☆ on any dataset to add to your favorites".

Idaho Department of Water Resources

SEARCH WITHIN MAP

My Activity

Esri, HERE, Garmin, FAO, NOAA, USGS, EPA

1-10 of 50 results

Most Recent

Share

4 attributes | 1 locations | Layer

Area of Common Groundwater Supply (from Ground Water Management)

Shared by IdahoDeptWaterResources

Information about the Eastern Snake Plain Aquifer Model can be found on the Idaho Department of Water Resources website.

13 attributes | 62 locations | Layer

Minimum Stream Flow (from Regulatory Areas)

Shared by IdahoDeptWaterResources

Idaho's Minimum Stream Flow Program was approved by the Legislature in 1978 to preserve stream flows and

My Favorites

click ☆ on any dataset to add to your favorites

Survey 123

Survey123 for ArcGIS

IDAHO DEPARTMENT OF WATER RESOURCES Well Construction Field Ins...

Metal Tag No.
D00

GPS Location
43°55'N 111°28'W

Latitude (Degree Decimal Minutes N/S)
43°54.997808688407304'N

Longitude (Degree Decimal Minutes E/W)
111°27.7574542271239'W

Inspector:
C Barnes

Inspection Date
Thursday, April 13, 2017

Apparent Well Use:

- ☐ Domestic (a)
- ☐ Domestic (b)
- ☐ Irrigation
- ☐ Commercial
- ☐ Municipal
- ☐ Industrial
- ☐ Public Water Supply
- ☐ Injection
- ☐ Monitoring
- ☐ Other

Survey123 for ArcGIS

IDAHO DEPARTMENT OF WATER RESOURCES Well Construction Field Ins...

Post Construction

Driller Present During Inspection?
☐ YES ☐ NO

Evidence of Chemigation?
☐ YES ☐ NO

Check Valve Installed?
☐ YES ☐ NO

Visible Nearby Contamination Source?
☐ YES ☐ NO

Water Tight Cap?
☐ YES ☐ NO

Flowing Artesian?
☐ YES ☐ NO

Casing Stickup > 12 inches?
☐ YES ☐ NO

Casing Condition:
Good

Evidence of Annular Seal?
☐ YES ☐ NO

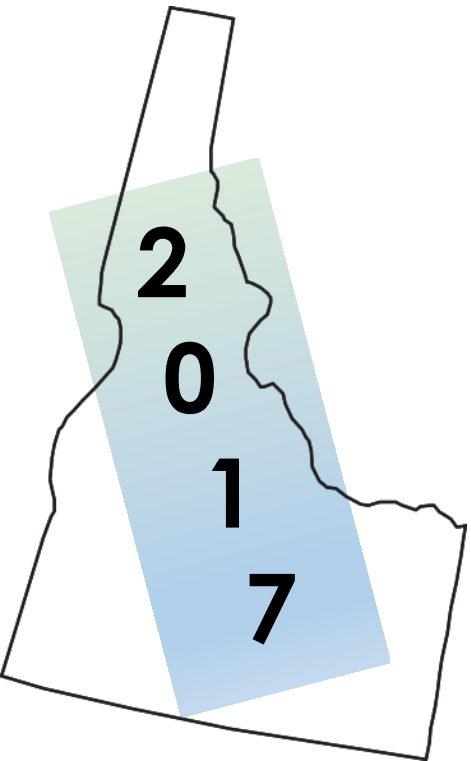
Metal Tag Present?
☐ YES ☐ NO

Measure Setback Distances?
☐ YES ☒ NO

Additional Notes About Well:

State GIS Strategic Plan Update

Pam Bond



2016 Idaho SDI Strategic Plan Update



What is SDI?

The Idaho Spatial Data Infrastructure (SDI) is the technology, policies, standards, human resources, and related activities necessary to acquire, process, distribute, use, maintain, and preserve spatial data for the use of the Citizens of the State of Idaho.

In a nutshell....



**ALL THINGS
GIS**

Background

- The initial version released 2009
 - 71 page strategic plan, 97 page business plan
 - Created with the help of a consulting firm
 - Lots of good information about all things GIS in Idaho
- The proposed update
 - 14 page strategic plan, no business plan
 - Consider it to be a living document
 - 3-5 years before next major revision
- Both plans
 - Conducted statewide GIS user surveys



Guiding Principles



6 of 10 still considered important/relevant:

- Seek to clearly represent the interests of my organization **with other** governing bodies and organizations (97%).
- **Act collaboratively** on programs or activities that can be better accomplished through collaboration or team work (95%)
- Seek solutions to issues of **common concern** (93%)
- **Inclusive** and open communication throughout Idaho's GIS community (93%).
- Seek resources from county, regional, state and federal agencies that will benefit Idaho's GIS **Community** (93%).
- Optimize efficiency in all aspects of GIS data development and use (92%).

“Demonstrate the importance of professional communities working collectively toward a better geographic information system for Idaho.”

GOAL #1

- Create/support a robust geospatial data clearinghouse for sharing current and historical TIM Framework and other authoritative data layers.
 - *Objective:* Seek and secure the funding and staffing needed for an official TIM geospatial data clearinghouse.
 - *Strategy:* Have a designated clearinghouse administrator who can reach out and support TIM/authoritative data stewards, review datasets and documentation and help keep them current, and maintain the clearinghouse website; acquire and maintain dedicated funding for this position.



GOAL #2

- Provide best available statewide TIM Framework data layers.
 - *Objective:* Increase the number of officially recognized TIM Framework data layers and create a recognizable TIM “brand”.
 - *Strategy:* Create an inventory of Framework data layers currently available from metadata; reinvigorate the Framework Leadership Team; start with the top 10 (as defined by current survey results) and work with the associated agencies/TWGS to get the data layers nominated – host TIM nomination workshop and TIM metadata workshop; host the Framework data layers in the geospatial data clearinghouse and brand as TIM.



GOAL #3

- Improve geospatial data quality.
 - *Objective:* Improve the quality and currentness of publically available GIS data through education and have data stewards publish their geospatial data as Open Geospatial Consortium (OGC) services (WMS, WFS, WCS, etc.).
 - *Strategy:* Increase education on and encouragement to follow State GIS policies and standards; education on proper metadata; education on transition to web services.



GOAL #4

- Improve delivery and accessibility of GIS services and information.
 - *Objective:* Increase stakeholder exposure to geospatial data and leverage the more user-friendly mapping applications to make geo-information more sharable and usable.
 - *Strategy:* Explore the use of data sharing applications such as Esri Open Data and data.gov; encourage not only GIS staff but others to use tools like Story Maps and Web Map Applications to relay geo-information to their customers and the public; encourage the use of mobile-friendly templates; funding for and encourage data stewards to use ArcGIS Server/shared State ArcGIS Server and enterprise ArcGIS Online accounts.



2016 GIS Strategic Plan Updates Summary

Goals	Objectives	Strategies	Lead	Status
GOAL 1: Create/support a robust geospatial data clearinghouse for sharing current and historical TIM Framework and other authoritative data layers.	Seek and secure the funding and staffing needed for an official TIM geospatial data clearinghouse.	Designated clearinghouse administrator to support TIM/authoritative data stewards (review and keep dataset current; maintain clearinghouse website.)	Pam Bond/Bruce Godfrey	
		Acquire and maintain dedicated funding for this position.	Bill Farnsworth	
GOAL 2: Provide best available statewide TIM Framework data layers.	Increase the number of officially recognized TIM Framework data layers and create a recognizable TIM “brand.	Create inventory of Framework data layers	Bill Farnsworth/Pam Bond/Jerry Korol	
		Reinvigorate Framework leadership team; Promote data layers nominations (TIM nominations workshops; TIM metadata workshops)	Pam Bond/Keith Weber/Donna Phillips	
		Host Framework data layers in geospatial clearinghouse and brand as TIM	Bruce Godfrey	
GOAL 3: Improve geospatial data quality.	Improve quality/currentness of publicly available GIS data through education. Have data stewards publish their geospatial data as Open Geospatial Consortium (OGC) services.	Education/encouragement to follow State GIS policies and standards	Bill Farnsworth	
		Education on proper metadata	Pam Bond/Wilma Robertson	
		Education on transition to web services	Keith Weber	
GOAL 4: Improve delivery and accessibility of GIS services and information.	Increase stakeholder exposure to geospatial data and leverage the more user-friendly mapping applications to make geo-information more sharable and usable.	Explore use of data sharing applications	ALL	
		Education/encouragement to use StoryMap/web application-like tools to relay geo-information to customers and public	ALL	
		Education/encouragement to use of mobile-friendly mapping templates	ALL	
		Funding for/encourage data stewards to use ArcGIS Server/shared ArcGIS Server and enterprise ArcGIS Online Account	ALL	

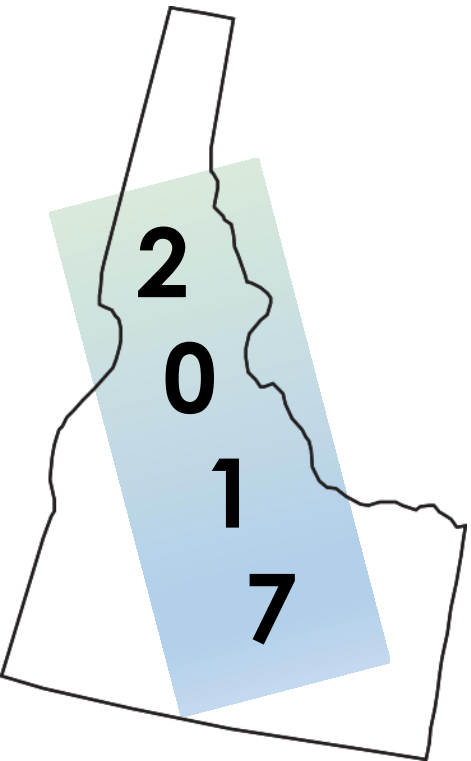


Completed



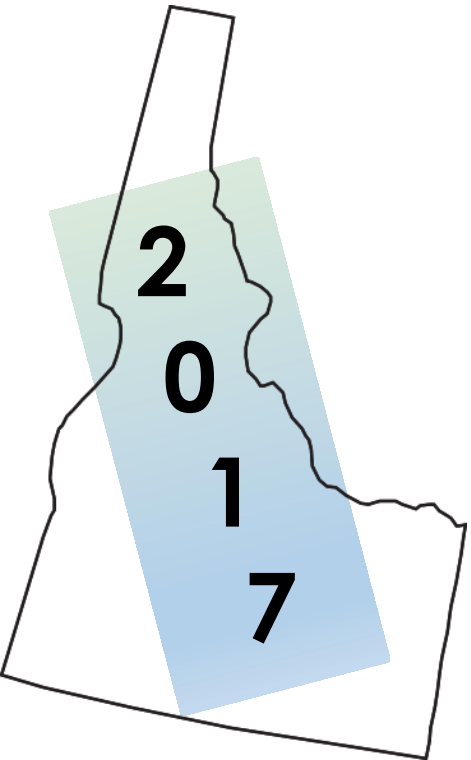
In Progress

TWG Updates



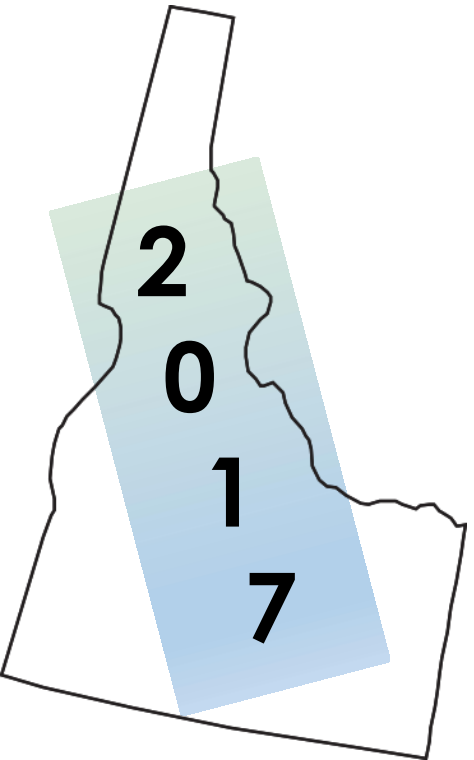
Geodetic Control Technical Working Group (GC-TWG)

Chair: Keith T Weber, GISP



Meetings

- GC-TWG meetings bi-monthly
- Primary/focus topics include
 - Multi-state control point database (MCPD)
 - Real-time network differential correction (TURN and SmartNet)

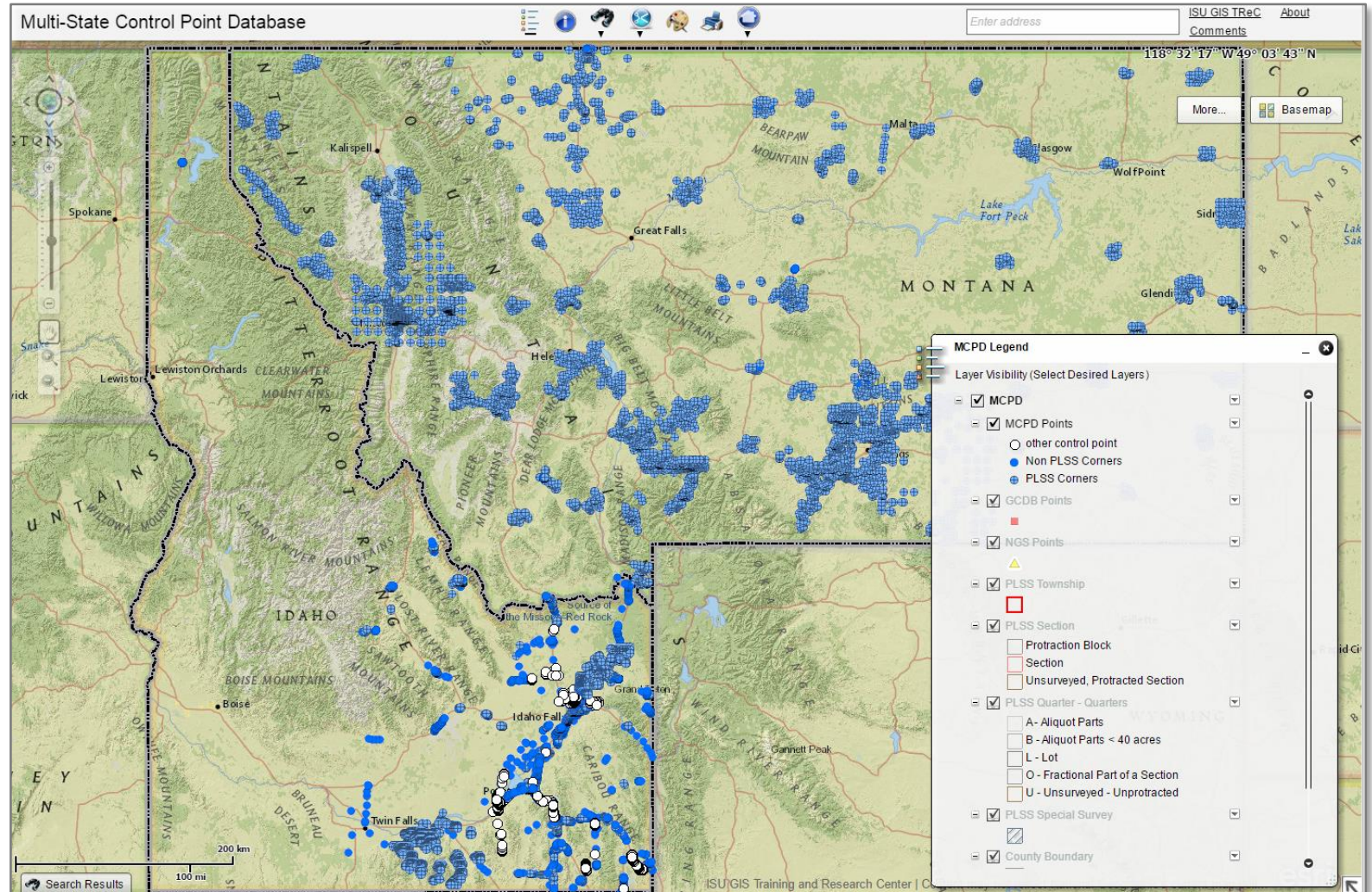
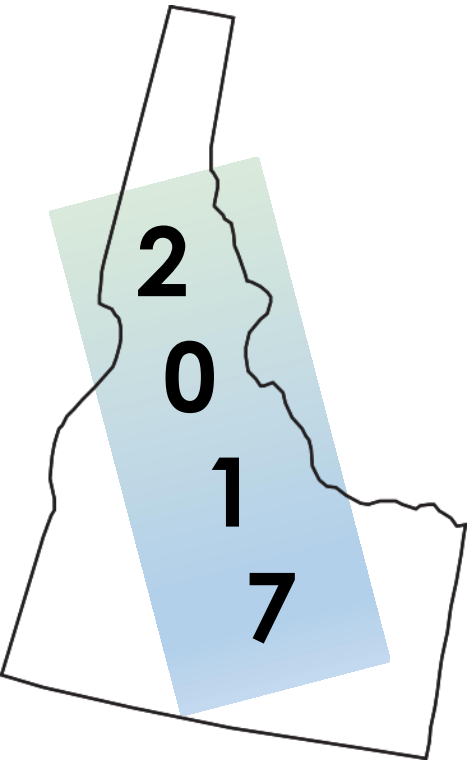


MCPD

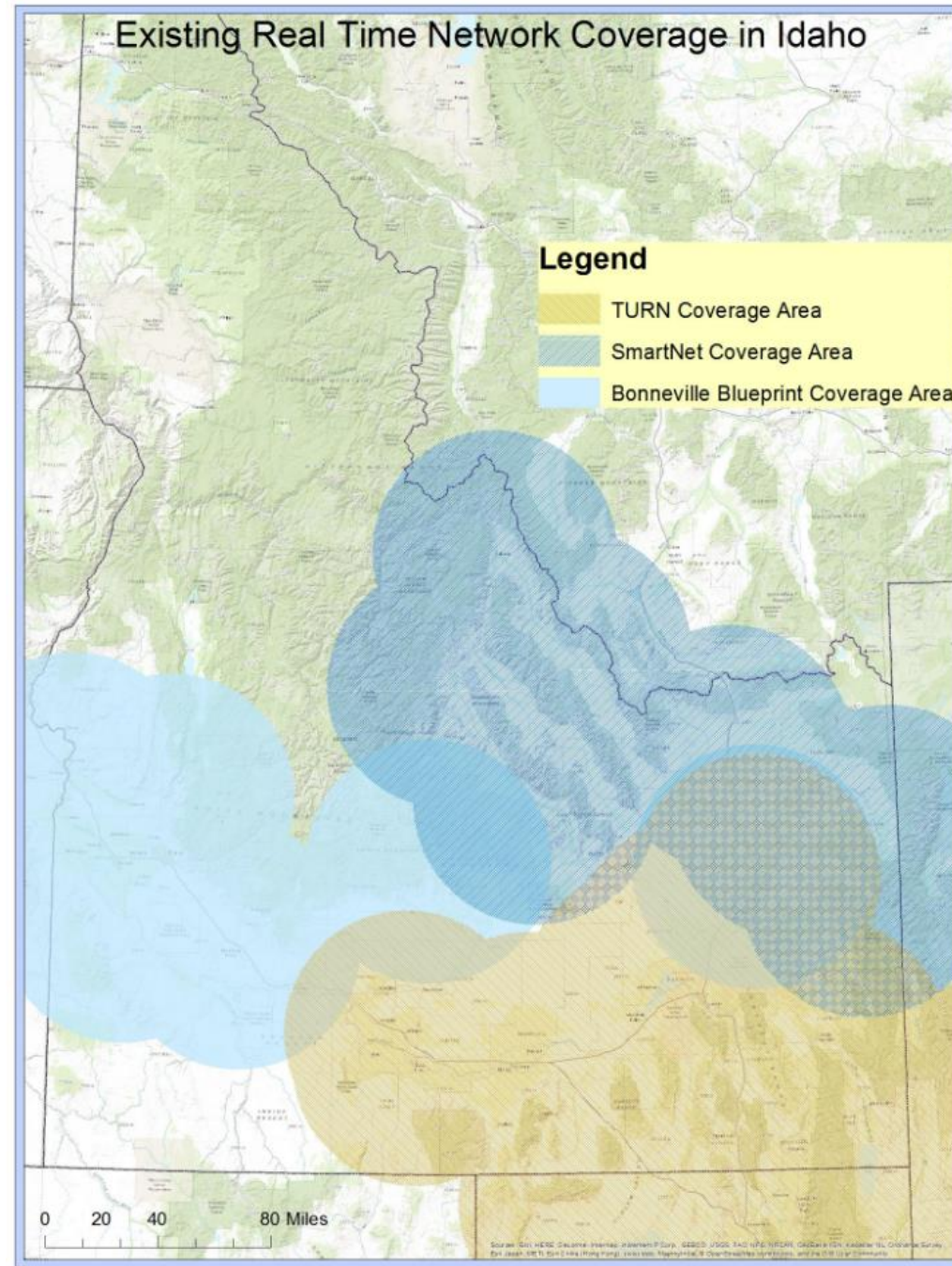
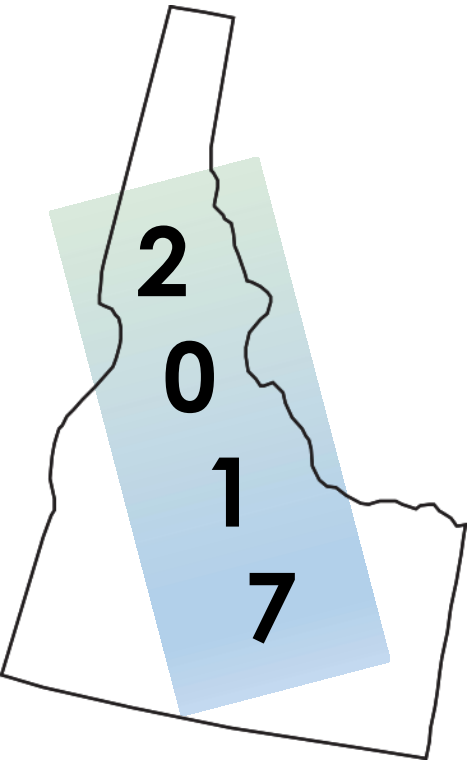
13,430 points total

Idaho = 8,511 points

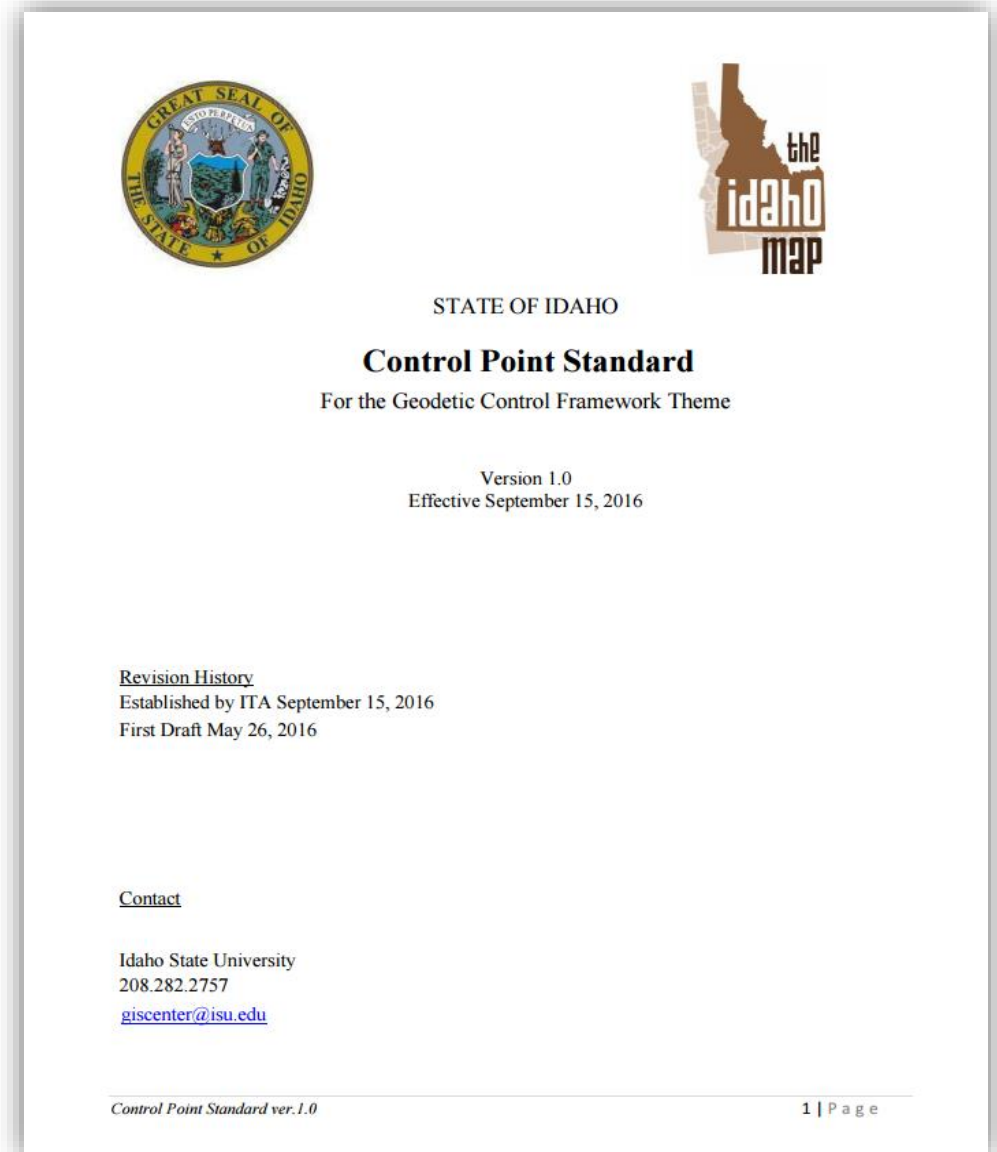
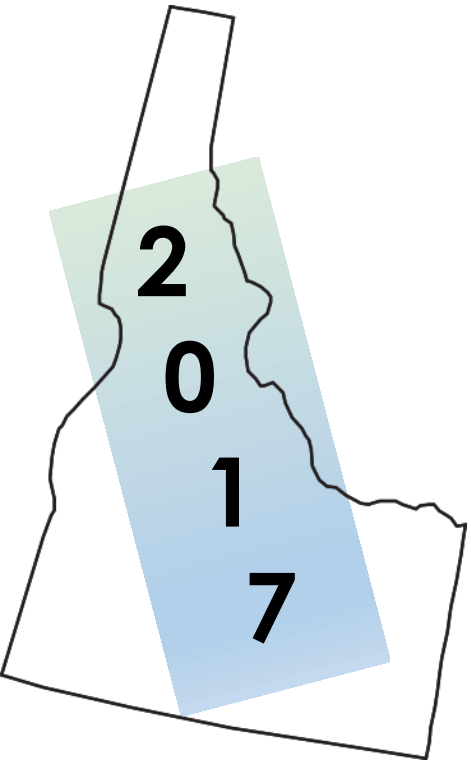
Montana = 4,919 points



RTN



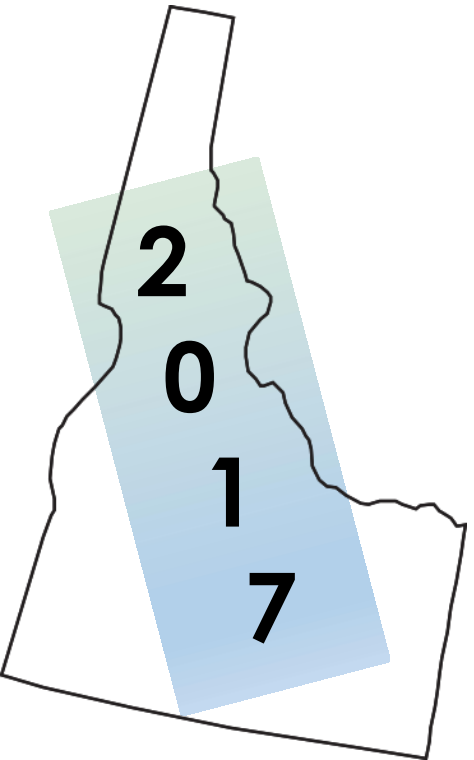
Control Point Standard



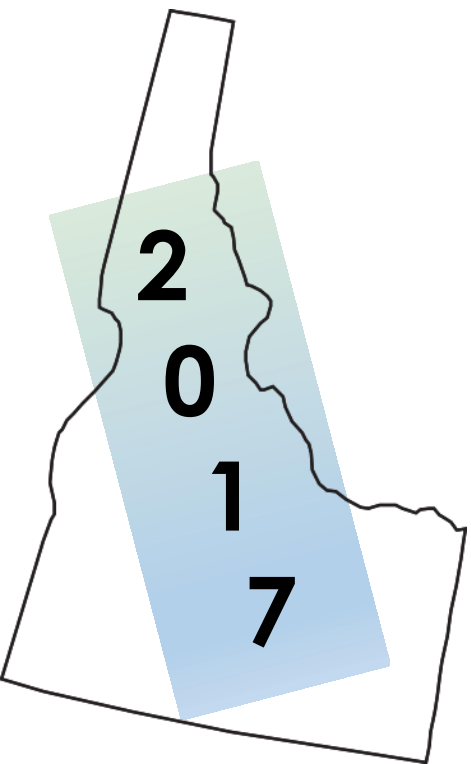
[https://gis.idaho.gov/pdf/Framework/GeodeticControl/ControlPoint
%20Standard APPROVED.pdf](https://gis.idaho.gov/pdf/Framework/GeodeticControl/ControlPoint%20Standard%20APPROVED.pdf)

Future

- Guideline and best practices document to understand control point life cycle

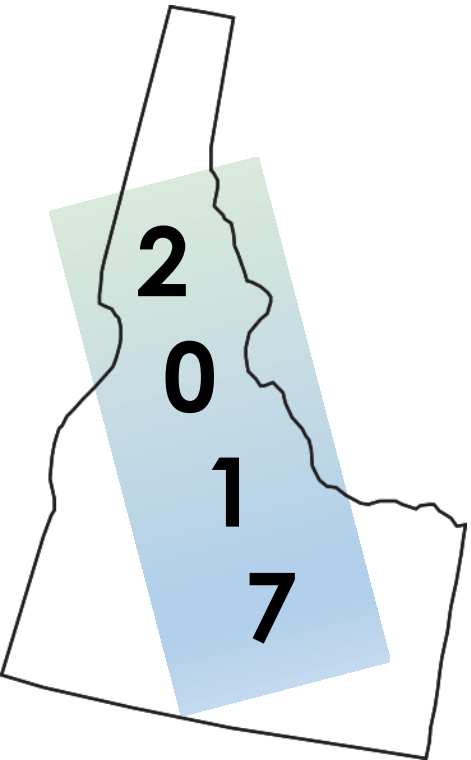


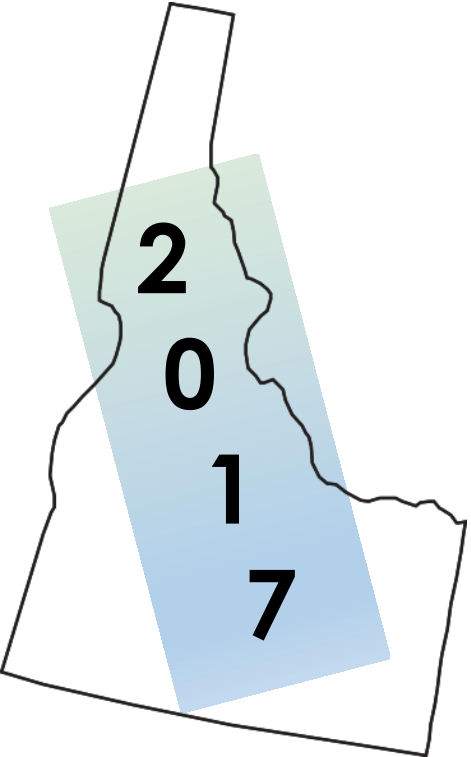
Questions?



Public Safety Working Group

Chair: Bill Reynolds, Nez Perce County

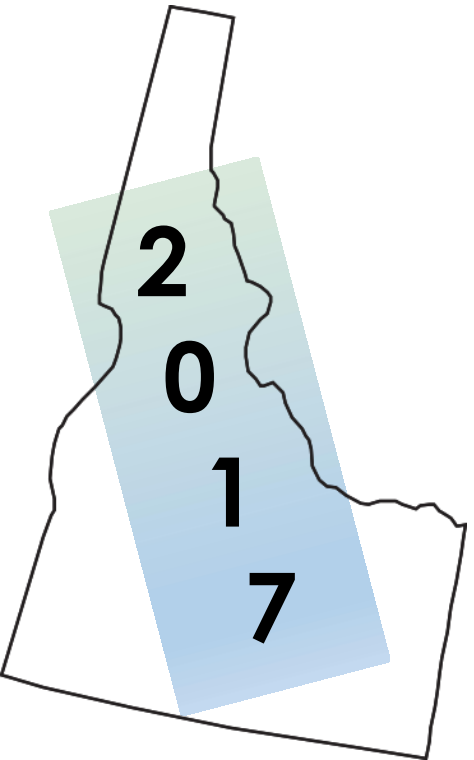


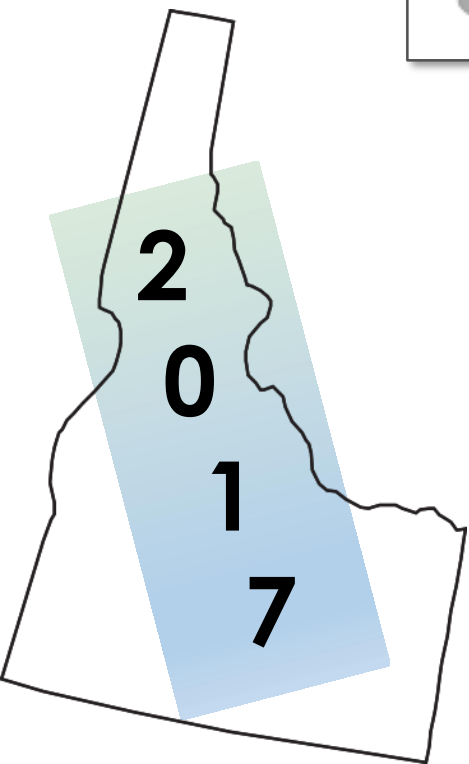


**Other
Business**

Other Business

IGC Membership:
Ways to promote involvement

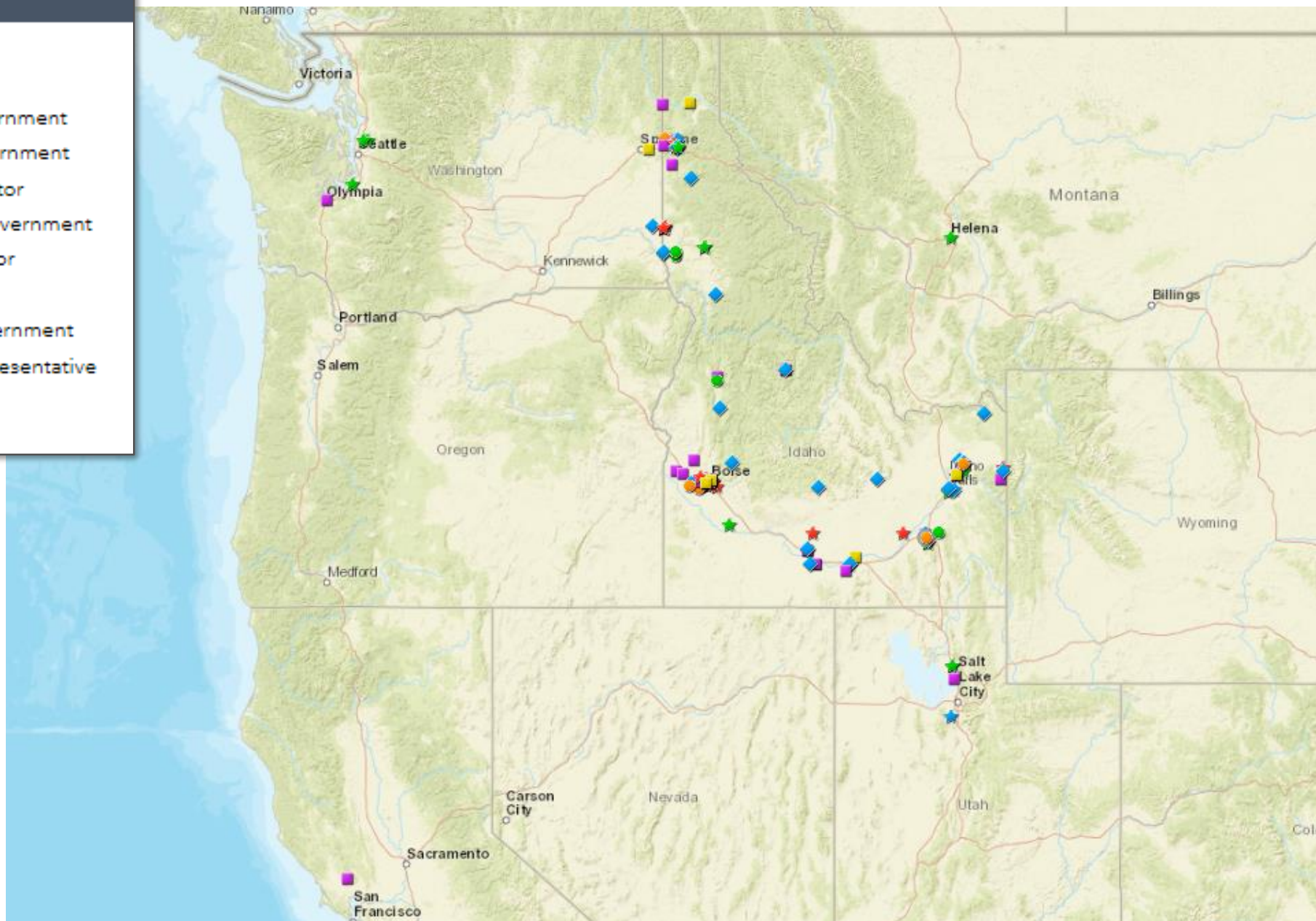




Legend

IGC Members

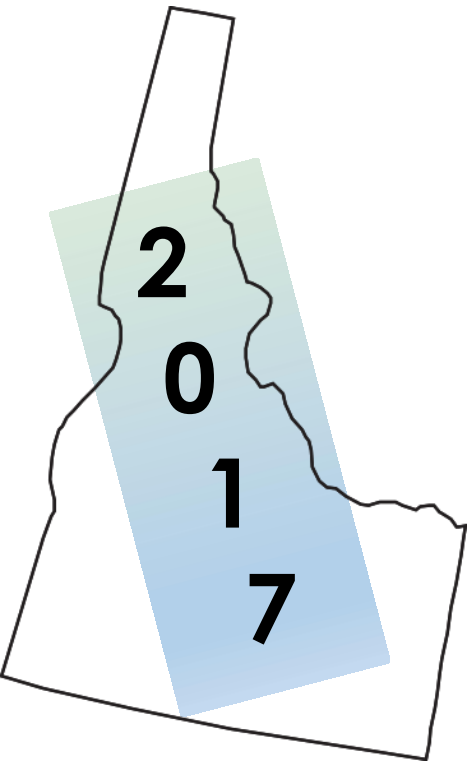
- ★ State Government
- ◆ Local Government
- Private Sector
- ★ Federal Government
- Other Sector
- Utility
- Tribal Government
- ★ Open Representative
- Other



Other Business

Cybersecurity Roundtable

October 2017 | Boise Centre on the Grove



*... The Roundtable will be held during the
Northwest GIS User Group meeting in Boise,
October 9-13, 2017*

